

1. (currently amended) In a communication network wherein packets of data are transmitted from a transmitting station to an addressed receiving station via a plurality of routers that determine the path of the transmission, a system for expediting the transmission comprising:

means for transmitting packets, each comprising a payload section including the content data being transmitted, a header including the address of the receiving station and a plurality of other headers;

means for substituting a code item to represent said plurality of other headers in one of said packets being transmitted;

means for determining which of said plurality of routers is ~~[[the]]~~ a destination router to the receiving display station;

means for determining whether said destination router has conversion means for converting said code item back into said plurality of headers represented by said code items;

means, responsive to said means for determining said destination router has said conversion means, for providing said conversion means to said ~~terminal~~ destination router for converting said code item back into said plurality of headers represented by said code items, whereby if said destination router does not have said conversion means, wherein said conversion means convert said code item back into said ~~original~~ plurality of headers; and

means for transmitting said packet with ~~original~~ plurality of headers from said ~~terminal~~ destination router to said receiving display station.

2. (cancelled)

3. (original) The communication network system of claim 1 wherein: said means for providing said conversion means provide said conversion means to a set of said routers;

and further including:

means at each of said set of routers for determining if the header including the address of the receiving station indicates that the router is the destination router; and

means responsive to said determining means for converting said code item through said conversion means back into said represented plurality of headers upon a determination that said router is the destination router.

4. (currently amended) The communication network system of claim [[2]] 1 wherein said conversion means includes a conversion table.

5. (original) The communication network system of claim 4 wherein said network is a packet switching network.

6. (currently amended) In a communication network wherein packets of data are transmitted from a transmitting station to an addressed receiving station via a plurality of routers that determine the path of the transmission, a system for expediting the transmission comprising:

means for transmitting packets, each comprising a payload section including the content data being transmitted, a header including the address of the receiving station and a plurality of other headers;

means for substituting a code item to represent said plurality of other headers in one of said packets being transmitted;

means for determining which of said routers is a last router beyond which normal transmission is expedited;

means for determining whether said last router has conversion means for converting said code item back into said plurality of headers represented by said code items;

means, responsive to said means for determining said last router has said conversion means, for providing said conversion means to said last router for converting said code item back into said plurality of headers represented by said code items, whereby if said last router does not have said conversion means, wherein said conversion means convert said code item back into said original plurality of headers; and

means for normally transmitting said packet with said original plurality of headers from said last router to said receiving display station.

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7. (cancelled)

8. (currently amended) In a communication network wherein packets of data are transmitted from a transmitting station to an addressed receiving station via a plurality of routers that determine the path of the transmission, a method for expediting the transmission comprising:

transmitting packets, each comprising a payload section including the content data being transmitted, a header including the address of the receiving station and a plurality of other headers;

substituting a code item to represent said plurality of other headers in one of said packets being transmitted;

determining which of said routers is the destination router to the receiving display station;

determining whether said destination router has a conversion process for converting said code item back into said plurality of headers represented by said code items;

if said destination router does not have said conversion process, providing said conversion process to said ~~terminal~~ destination router for converting said code item back into said plurality of headers represented by said code items, whereby wherein said conversion means process converts said code item back into said ~~original~~ plurality of headers; and

transmitting said packet with ~~original~~ plurality of headers from said ~~terminal~~ destination router to said receiving display station.

9. (cancelled)

10. (original) The communication network method of claim 8 wherein: said conversion process is provided to a set of said routers;

and further including:

determining at each of said set of routers if the header including the address of the receiving station indicates that the router is the destination router;

and

converting said code item through said conversion process back into said represented plurality of headers upon a determination that said router is the destination router.

11. (currently amended) The communication network method of claim [[9]] 8 wherein said conversion step uses a conversion table.

12. (original) The communication network method of claim 11 wherein said network is a packet switching network.

13. (currently amended) In a communication network wherein packets of data are transmitted from a transmitting station to an addressed receiving station via a plurality of routers that determine the path of the transmission, [[said]] a method for expediting the transmission comprising:

transmitting packets, each comprising a payload section including the content data being transmitted, a header including the address of the receiving station and a plurality of other headers;

substituting a code item to represent said plurality of other headers in one of said packets being transmitted;

determining which of said routers is a last router beyond which normal transmission is expedited;

determining whether said last router has conversion means for converting said code item back into said plurality of headers represented by said code items;

if said last router does not have said conversion process, providing a conversion process to said last router for converting said code item back into said plurality of headers represented by said code items; and

transmitting said packet with ~~original~~ said plurality of headers from said last router to said receiving display station.

14-21. (cancelled)

22. (new) A computer usable medium having stored thereon, a computer program for expediting transmission in a communication network wherein packets of data are transmitted from a transmitting station to an addressed receiving station via a plurality of routers that determine the path of the transmission, wherein the computer program when executed on a computer causes the computer to:

- transmit packets, each comprising a payload section including the content data being transmitted, a header including the address of the receiving station and a plurality of other headers;

- substitute a code item to represent said plurality of other headers in one of said packets being transmitted;

- determine which of said routers is the destination router to the receiving display station;

- determine whether said destination router has a conversion process for converting said code item back into said plurality of headers represented by said code items;

- if said destination router does not have said conversion process, provide said conversion process to said destination router for converting said code item back into said plurality of headers represented by said code items, wherein said conversion process converts said code item back into said plurality of headers; and

- transmit said packet with said plurality of headers from said destination router to said receiving display station.

23. (new) The computer usable medium of claim 22 wherein said conversion process is provided to a set of said routers; and
said computer program when executed further causes the computer to:
determine at each of said set of routers if the header including the address of the receiving station indicates that the router is the destination router;
and
convert said code item through said conversion process back into said represented plurality of headers upon a determination that said router is the destination router.
24. (new) The computer usable medium of claim 22 wherein said conversion process uses a conversion table.
25. (new) The computer usable medium of claim 22 wherein said network is a packet switching network.

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26. (new) A computer usable medium having stored thereon, a computer program for expediting transmission in a communication network wherein packets of data are transmitted from a transmitting station to an addressed receiving station via a plurality of routers that determine the path of the transmission, wherein the computer program when executed on a computer causes the computer to:

- transmit packets, each comprising a payload section including the content data being transmitted, a header including the address of the receiving station and a plurality of other headers;

- substitute a code item to represent said plurality of other headers in one of said packets being transmitted;

- determine which of said routers is a last router beyond which normal transmission is expedited;

- determine whether said last router has conversion means for converting said code item back into said plurality of headers represented by said code items;

- if said last router does not have said conversion process, provide a conversion process to said last router for converting said code item back into said plurality of headers represented by said code items; and

- transmit said packet with said plurality of headers from said last router to said receiving display station.

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